

TEOS: 60934360

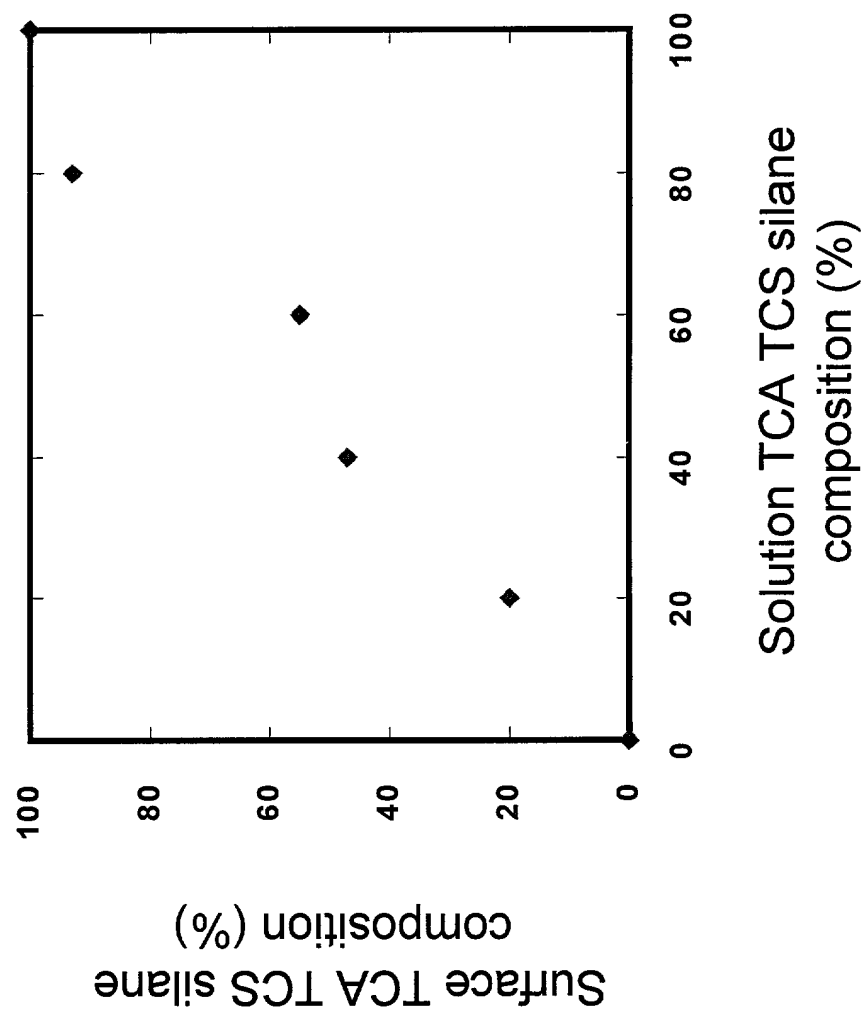


Figure 1

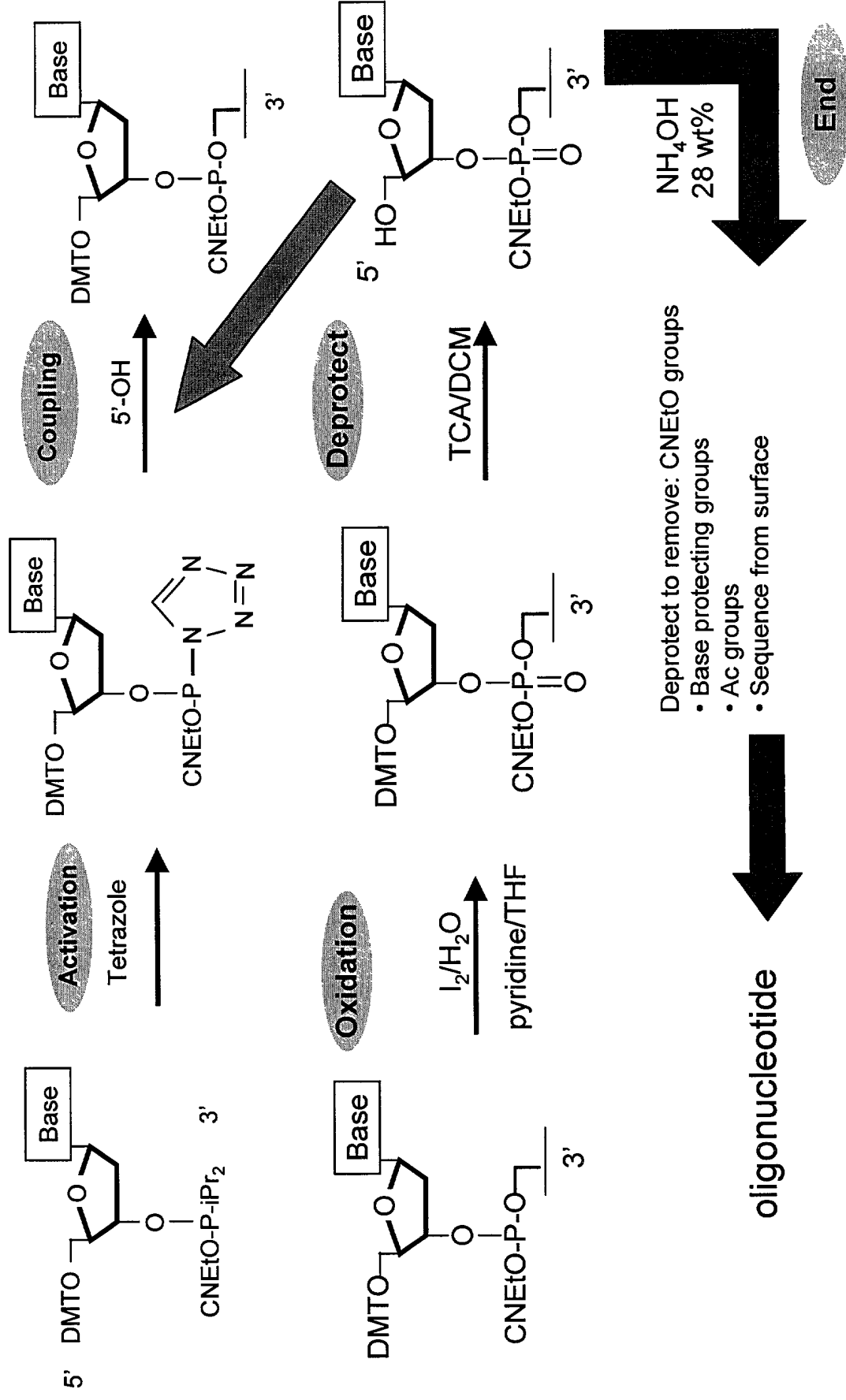
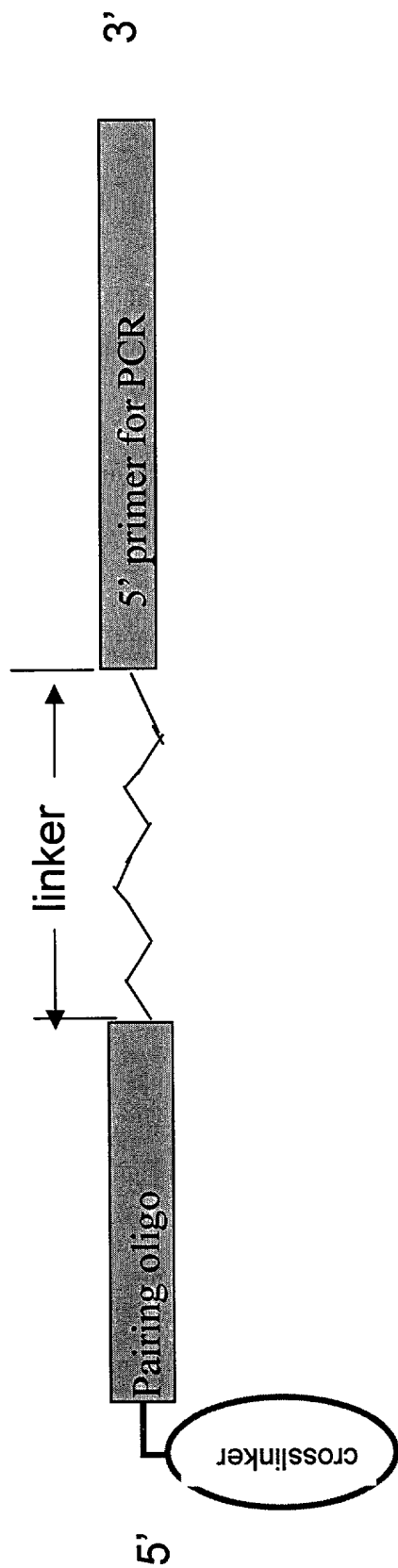


Figure 2

* CNEtO=cynoethanol, iPr=isopropyl, DMT=dimethyl trityl, Ac=acetyl, TCA=trichloroacetic acid, DCM= CH_2Cl_2

Customized PCR 5' Primer

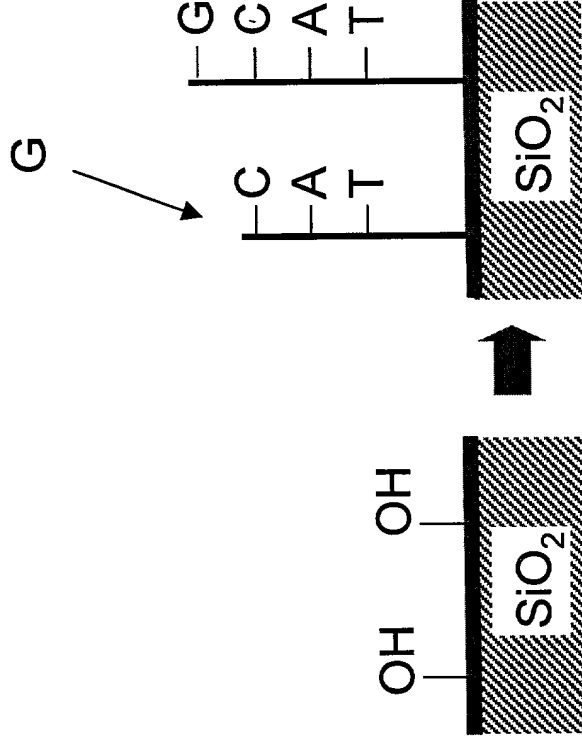


PCR Product with 5' Dangling End



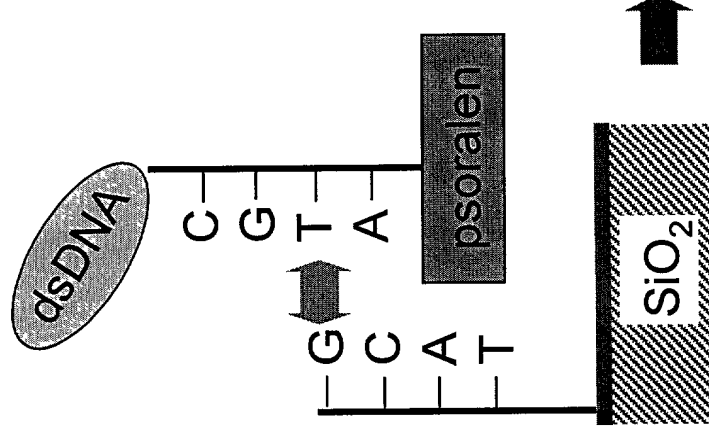
Figure 3

1. Coupling
2. Capping
3. Oxidation
4. Deprotection

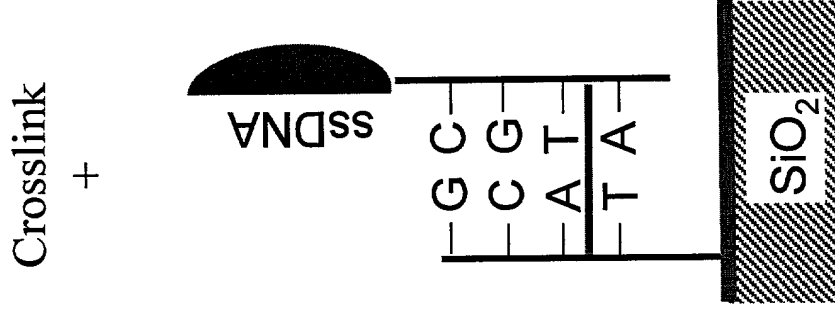


Derivatize
reactive surface

Stepwise oligo
synthesis

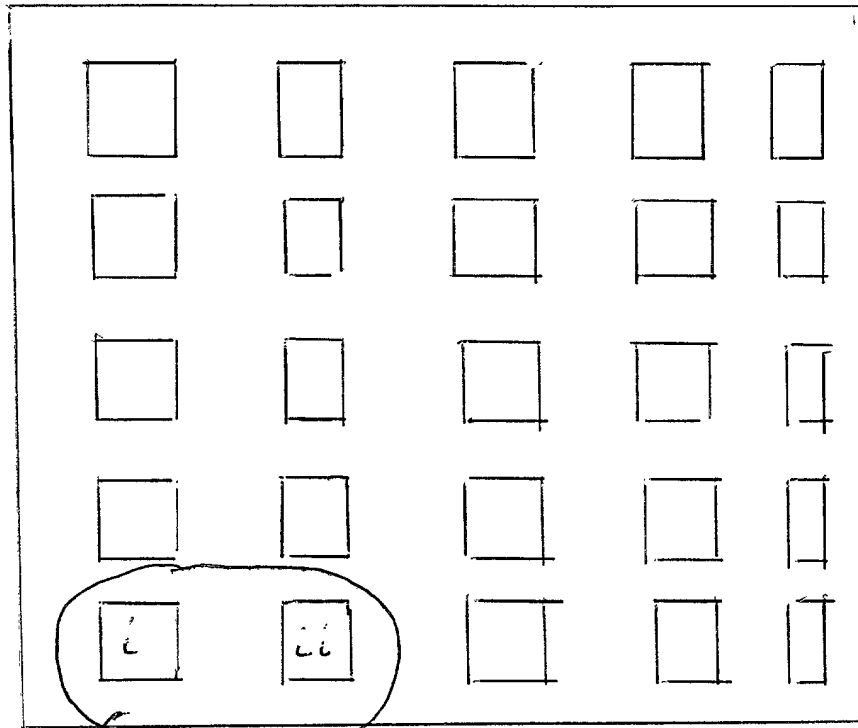


Hybridize dsDNA
with dangling end

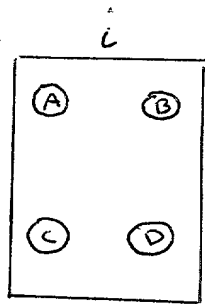


Crosslink dsDNA
and heat to expose
ssDNA probe

A

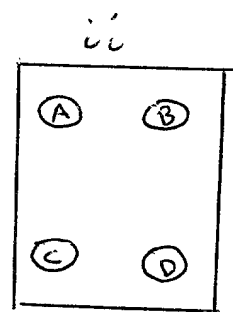
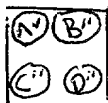


B



+

A' - A''
B' - B''
C' - C''
D' - D''
↓



+

A' - E''
B' - F''
C' - G''
D' - H''
↓

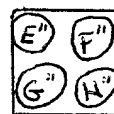
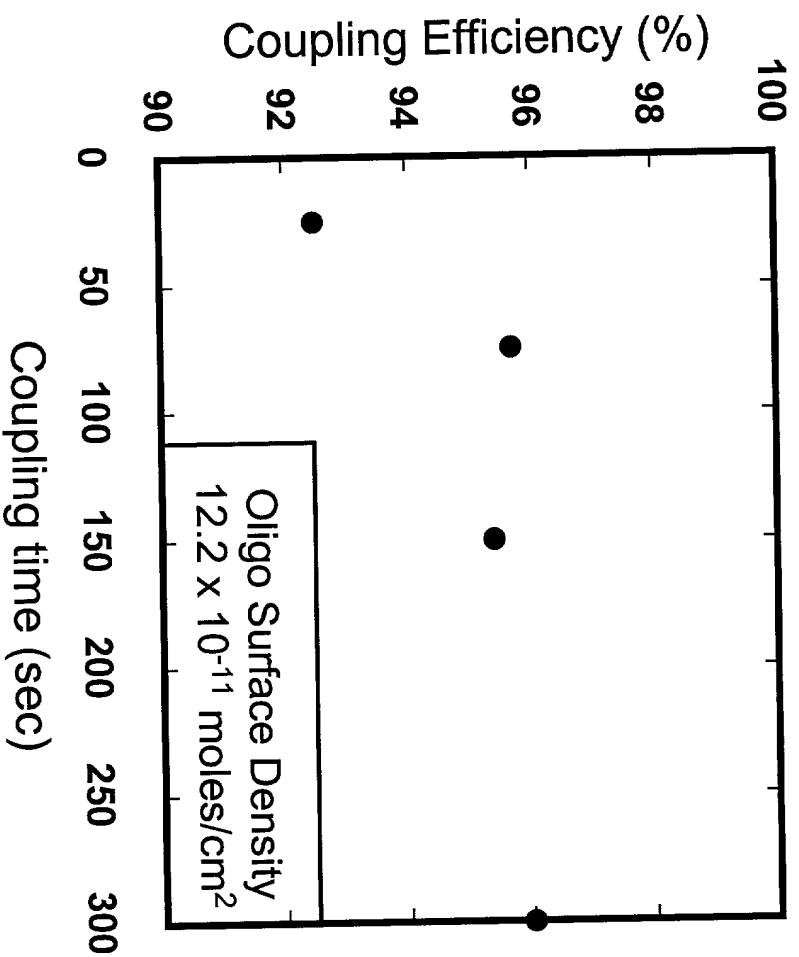
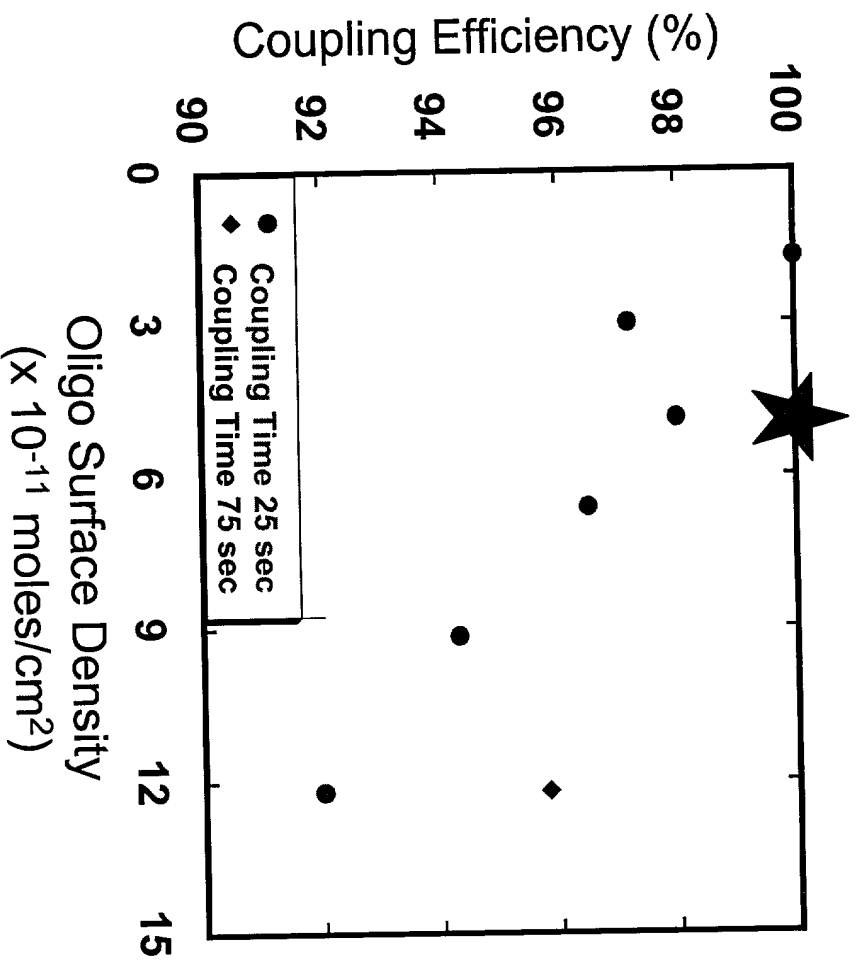


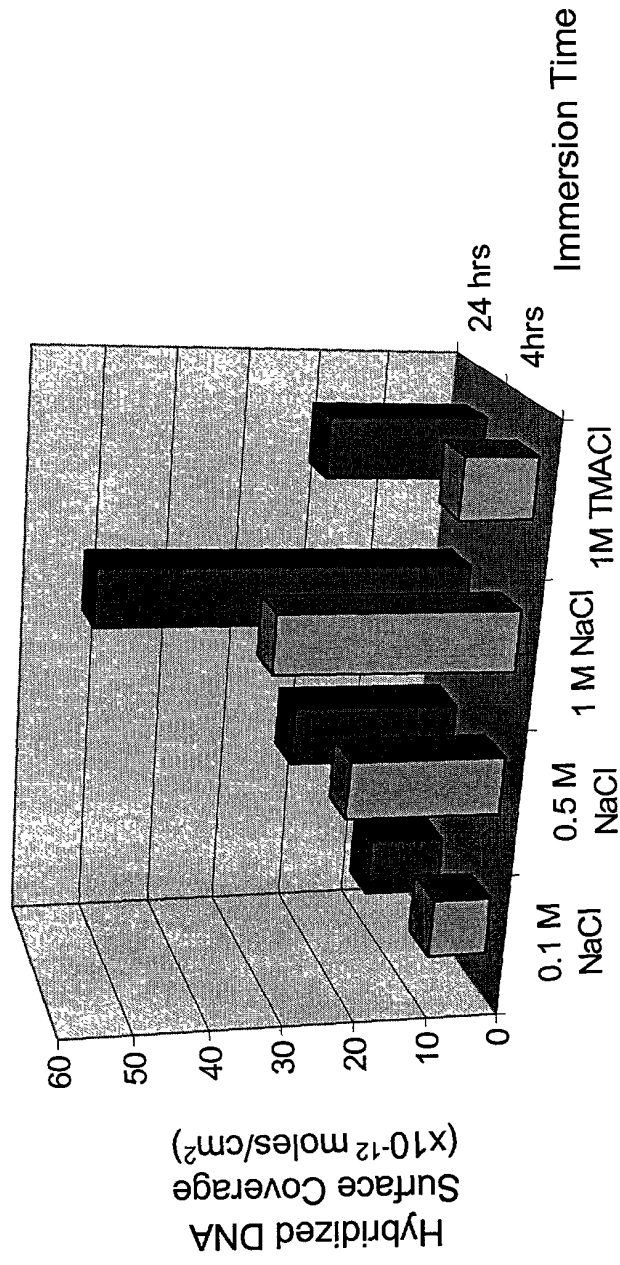
Figure 5



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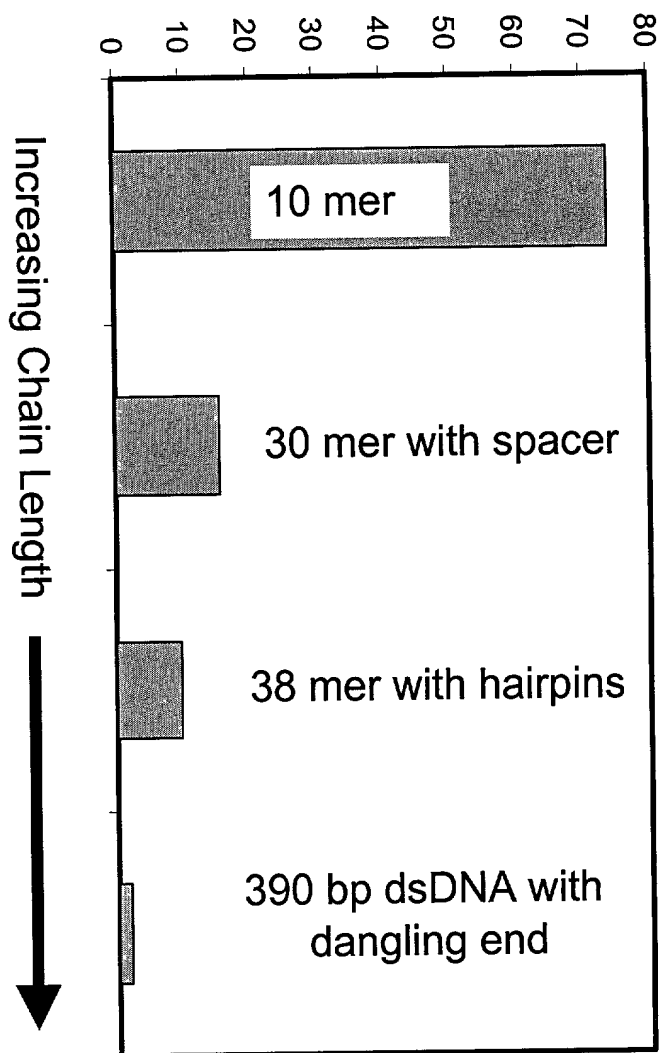
Figure 6

* Oligo solution concentration = $0.5 \mu\text{M}$
 Hybridization temperature = 4°C
 OH silane oligo (40%)



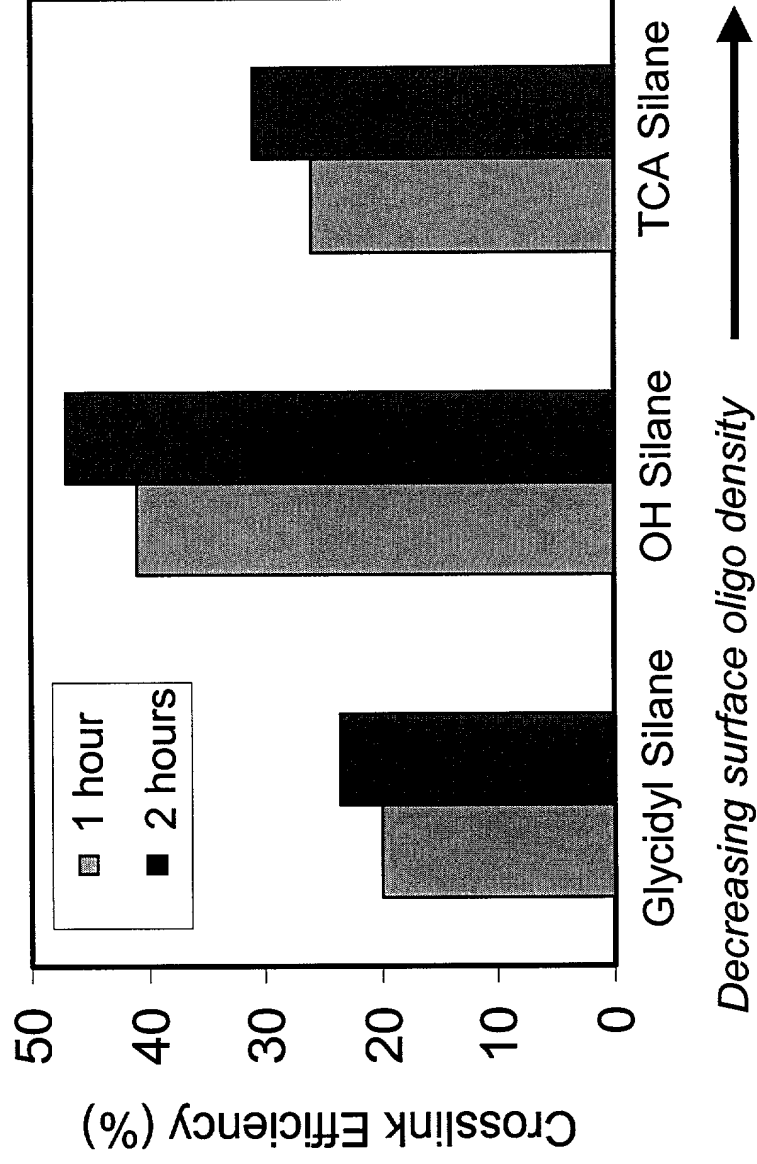
Salt Species and Concentration

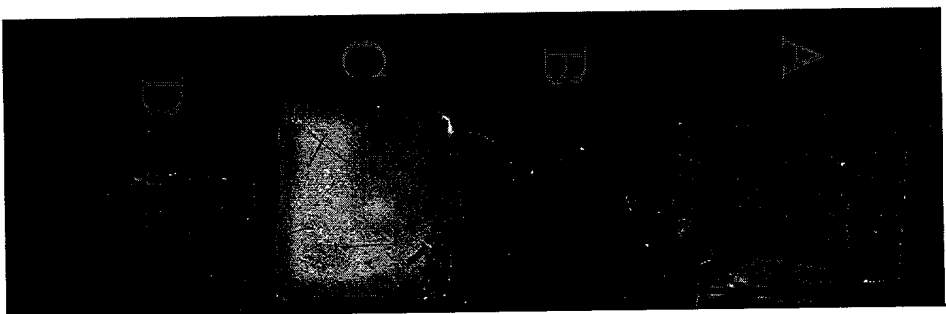
Hybridization Yield
($\times 10^{-13}$ moles/cm²)



0984809-050301

Figure 2





09848609.050301

Figure 10